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[Translation]

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Applicant: Kwang Myung Equipment and Electric Company
Title of the invention: Organic polymeric solid insulating material and method thereof

[Claims]

1. Organic polymeric solid insulator consisting of 80-95 wt% of an inorganic material containing silica constituted of 5 or more kinds of sizes and having purity of 99.0% or more, aluminium hydroxide, titanium dioxide and mixed pigment; and 5-20 wt% of an organic material containing unsaturated polyester containing styrene monomer (in the amount of 40-60 wt % of unsaturated polyester) and having viscosity of 10-150 cps at room temp., styrene monomer as crosslinker and diluent, 6% cobalt naphthenate as activator, hydroquinone as decelerator, 2 kinds of specific plastic additives as defoamer, silane as binder of organic and inorganic materials, methyl ketone as hardening agent of unsaturated polyester, and oxide or similar peroxide; wherein the amount of said titanium dioxide is 2 wt % of inorganic material, that of said styrene monomer is 6-12 wt% of organic material, and that of said silan is 0.5-2.0 wt% of organic material.
6. A process for preparing organic polymeric solid insulator comprising the steps of
 - (i) mixing 80-95 wt % of an inorganic material containing silica, aluminium hydroxide, titanium dioxide and mixed pigment in vibrating mixer;
 - (ii) injecting and mixing 5-20 wt% of an organic material containing unsaturated polyester having styrene monomer in the amount of 40-60 wt % of unsaturated polyester, styrene monomer as crosslinker and diluent, 6% cobalt naphthenate as activator, hydroquinone as decelerator, 2 kinds of specific plastic additives as defoamer, silane as binder of organic and inorganic materials, methyl ketone as hardening agent of unsaturated polyester, and oxide or similar peroxide, with the inorganic material in the vibrating mixer;
 - (iii) removing a bubble from the mixture through vibration supplied after the mixture was located within vacuum reactor having constant 5-20 mmHg;
 - (iv) injecting the mixture into a mold made of silicon rubber while vibrating the mold, after fixing the mold within the vacuum reactor;
 - (v) hardening it at room temp. for 3-4 hours;
 - (vi) demolding and hardening it at roop temp. for 24 hours; and
 - (vii) hardening with heating it for 3 hours.